

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/25/2010 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 106, 110, 112, 113, 116, 119, 125, 127, 129, 144-146, 148 filed on 02/25/2010 have been fully considered but they are not persuasive.

In re page 14, Applicants argue that in Yoshida, either alone or in combination with any art of record, does not teach, disclose or suggest at least the "optical properties changing unit" of independent claims 106, 112 and 120, the "optical properties changing means" of independent claims 144, or the method reciting "an optical properties changing unit" of independent claims 125.

In response, regarding claim 106, the Applicants amended claim 106 with limitation "an optical properties changing unit integrated into a part of the housing including functionality of moving to cooperate with the lens module of the camera system so as to enable taking pictures using the camera system with changed optical imaging properties." The Examiner considers that claim 106 as amended still does not distinguish from Yoshida et al. reference. The housing of the digital camera 100 of Yoshida reference comprises a mechanism (such as a zoom button, a

movable barrel for holding zoom lens) for shifting zooming positions manually, which changes the magnification of zoom lens 108, figure 1, which corresponds to “an optical properties changing unit integrated into a part of the housing including functionality of moving to cooperate with the lens module of the camera system so as to enable taking pictures using the camera system with changed optical imaging properties.”

3. Applicant's arguments with respect to claims 120, 121, 124, 147 filed on 02/25/2010 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

4. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

There are two newly added claims number 151, therefore the second new claim 151 should be renumbered as 152, and newly added claims 152-155 should be renumbered as 153-156, respectively.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 106, 110, 112, 113, 116, 119-121, 124, 125, 127, 129, 144-148 are rejected under 35 U.S.C. 102(e) as being anticipated by Yoshida et al. (U.S. Patent 6,690,417).

Referring to claim 106, the Yoshida reference discloses in Figures 1 and 3, a mobile terminal device (100) comprising: a housing of the mobile terminal device comprising at least one telecommunications component and a camera system (See Col. 5, lines 23-30) comprising a lens module (108) which enables taking pictures with optical imaging properties given by the lens module; an optical properties changing unit integrated into a part of the housing including functionality of moving to cooperate with the lens module of the camera system (Yoshida et al. disclosed that lens 108 is zoom lens of three-time magnification, which is structured to shift the zooming positions manually, for example, in terms of a 35 mm camera, it has focal length of 24 mm to 103 mm (Column 7, lines 26-45). This indicates that the digital camera 100 includes a mechanism (such as a zoom button, a movable barrel for holding zoom lens) for shifting zooming positions manually, which changes the magnification of zoom lens 108, which corresponds to “an optical properties changing unit”), so as to enable taking pictures using the camera system with changed optical imaging properties (Yoshida et al. disclosed that lens 108 is zoom lens of three-time magnification, which is structured to shift the zooming positions manually, for example, in terms of a 35 mm camera, it has focal length of 24 mm to 103 mm (Column 7, lines 26-45). This indicates that the digital camera 100 includes a mechanism (such as a zoom button, a movable barrel for holding zoom lens) for shifting zooming positions

manually, it is clear that this mechanism is a part of the digital camera (a part of a housing)), wherein the optical changing unit comprises **at least one of** the following: a lens, an objective comprising lenses, at least one filter, a diffractive optical element, and combination thereof” (Since claim 106 recites limitation “**at least one of**”, the Examiner considers that Yoshida still disclose claim limitation “wherein the optical changing unit comprises a lens,” as a lens 108, Figure 1, Column 5, Lines 25-30).

Referring to claim 110, the Yoshida reference discloses wherein the camera system is built into said mobile terminal device as shown Figure 1.

Referring to claim 112, the Yoshida reference discloses wherein said mobile terminal device is a mobile phone as shown in Figures 1.

Referring to claim 113, the Yoshida reference discloses in Figures 1 and 3, a part of a housing of a mobile terminal device (100), which the mobile terminal device comprises at least one telecommunications component and a camera system, comprising:

an optical properties changing unit integrated into the part of the housing including functionality of moving to cooperate with a lens module of the camera system to enable taking pictures with optical properties given by the lens module and the optical properties changing unit when the optical properties changing unit is cooperating with the lens module (Yoshida et al. disclosed that lens 108 is zoom lens of three-time magnification, which is structured to shift the

zooming positions manually, for example, in terms of a 35 mm camera, it has focal length of 24 mm to 103 mm, Column 7, lines 26-45. This indicates that the digital camera 100 includes a mechanism (such as a zoom button, a movable barrel for holding zoom lens) for shifting zooming positions manually, which changes the magnification of zoom lens 108, which corresponds to “an optical properties changing unit”),

wherein the optical properties changing unit comprises **at least one of** the following: a lens, an objective comprising lenses, at least one filter, a diffractive optical element, and combination thereof’ (Since claim 113 recites limitation “**at least one of**”, the Examiner considers that Yoshida still disclose claim limitation “wherein the unit comprises a lens,” as a lens 108, Figure 1, Column 5, Lines 25-30).

Referring to claim 116, the Yoshida reference discloses wherein the optical changing unit comprises a plurality of different optical assemblies (e.g., changing focal length for zooming and changing F number for setting optical apertures) integrated in the part of the housing, wherein the assembly is changeable upon actuation (See Column 7, Lines 20-54).

Referring to claim 119, the Yoshida reference discloses all subject matter as discussed with respected same comments to claims 112 and 113.

Referring to claim 120, the Yoshida reference discloses all subject matter as discussed with respected same comments to claim 113.

Referring to claim 121, the Yoshida reference discloses all subject matter as discussed with respected same comments to claim 115.

Referring to claim 124, the Yoshida reference discloses all subject matter as discussed with respected same comments to claim 119.

Referring to claim 125, the Yoshida reference discloses all subject matter as discussed with respected same comments to claims 106 and 113.

Referring to claim 127, the Yoshida reference discloses all subject matter as discussed with respected same comments to claim 110.

Referring to claim 129, the Yoshida reference discloses all subject matter as discussed with respected same comments to claim 112.

Referring claim 144, the Yoshida reference discloses all subject matter as discussed with respected same comments to claim 106.

Referring claims 145, 146, 147, 148, Yoshida et al. discloses wherein the housing is a unitary housing configured to cover the entire mobile terminal device (digital camera 100, Figure 1, Column 5, Lines 23-30).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 107, 108, 114, 115 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida et al. (U.S. Patent 6,690,417) in view of Suda et al. (U.S. Patent 6,373,524).

Referring to claim 107, the Yoshida reference discloses all subject matter as discussed with respect to claim 106, except that the Yoshida reference does not explicitly show the the optical properties changing unit is detachably connected with said camera system.

The Suda reference teaches in Figure 1, an interchangeable lens assembly (127) camera system including zoom and focus lenses (102 and 105), motors (121 and 125) for driving the zoom and focus lenses and controlled by motor control circuit (118) as providing the means for changing optical properties; and the interchangeable lens assembly is detachably connected with the camera system (camera main body 128, see Col. 5, lines 49-60). The Suda reference is evidence that one of ordinary skill in the art at the time to see more advantages the digital camera system having an interchangeable lens assembly (including optical properties changing unit)

detachably attached to the camera main body so that the camera system can easily work with different types interchangeable lenses (See Col.3, lines 9-21). For that reason, it would have been obvious to one of ordinary skill in the art to modify the camera system of Yoshida ('417) by providing means changing optical properties is detachably connected with the camera system as taught by Suda ('524).

Referring claim 108, the Yoshida and Suda references disclose all subject matter as discussed with respected same comments to claim 107.

Referring to claim 114, the Yoshida and Suda references disclose all subject matter as discussed with respected same comments to claim 107.

Referring to claim 115, the Yoshida and Suda references disclose all subject matter as discussed with respected same comments to claims 107 and 113, and Suda reference discloses wherein said part of said housing (camera) is detachably connected to a lens module.

Allowable Subject Matter

9. Claims 149-155 (with two claims number 151) renumbered as 149-156 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LUONG T. NGUYEN whose telephone number is (571)272-7315. The examiner can normally be reached on 7:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DAVID L. OMETZ can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/LUONG T NGUYEN/
Primary Examiner, Art Unit 2622
03/28/10

